Amendment to the Claims:

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An isolated or recombinant [[A purified]] antibody that specifically binds to a polypeptide (a) encoded by a nucleic acid comprising a sequence having at least 70% sequence identity to SEQ ID NO:1 and encoding a polypeptide having polymerase activity, or (b) having polymerase activity and at least 75% sequence identity to a sequence as set forth in SEQ ID NO:2~~, and sequences substantially identical thereto~~.

Claim 2 (currently amended): An isolated or recombinant [[A purified]] antibody that specifically binds to a polypeptide having at least [[10]] 30 consecutive amino acids of a polypeptide (a) encoded by a nucleic acid comprising a sequence having at least 70% sequence identity to SEQ ID NO:1 and encoding a polypeptide having polymerase activity, or (b) having at least 75% sequence identity to a sequence as set forth in SEQ ID NO:2 ~~one of the polypeptides of SEQ ID NO:2, and sequences substantially identical thereto~~.

Claim 3 (new): The isolated or recombinant antibody of claim 1 or claim 2, wherein the nucleic acid comprises a sequence having at least 75% sequence identity to SEQ ID NO:1.

Claim 4 (new): The isolated or recombinant antibody of claim 3, wherein the nucleic acid comprises a sequence having at least 80% sequence identity.

Claim 5 (new): The isolated or recombinant antibody of claim 4, wherein the nucleic acid comprises a sequence having at least 85% sequence identity.

Claim 6 (new): The isolated or recombinant antibody of claim 5, wherein the nucleic acid comprises a sequence having at least 90% sequence identity.

Claim 7 (new): The isolated or recombinant antibody of claim 6, wherein the nucleic acid comprises a sequence having at least 95% sequence identity.

Claim 8 (new): The isolated or recombinant antibody of claim 7, wherein the nucleic acid comprises a sequence having at least 97% sequence identity.

Claim 9 (new): The isolated or recombinant antibody of claim 8, wherein the nucleic acid comprises a sequence as set forth in SEQ ID NO:1.

Claim 10 (new): The isolated or recombinant antibody of claim 1 or claim 2, wherein the polypeptide has at least 80% sequence identity to a sequence as set forth in SEQ ID NO:2.

Claim 11 (new): The isolated or recombinant antibody of claim 10, wherein the polypeptide has at least 85% sequence identity.

Claim 12 (new): The isolated or recombinant antibody of claim 11, wherein the polypeptide has at least 90% sequence identity.

Claim 13 (new): The isolated or recombinant antibody of claim 12, wherein the polypeptide has at least 95% sequence identity.

Claim 14 (new): The isolated or recombinant antibody of claim 13, wherein the polypeptide has at least 97% sequence identity.

Claim 15 (new): The isolated or recombinant antibody of claim 14, wherein the polypeptide comprises a sequence as set forth in SEQ ID NO:2.

Claim 16 (new): The isolated or recombinant antibody of claim 1 or claim 2, further comprising a detectable label.

Claim 17 (new): The isolated or recombinant antibody of claim 16, wherein the detectable label comprises a fluorescent agent, an enzymatic label, or a radioisotope.

Claim 18 (new): The isolated or recombinant antibody of claim 1 or claim 2, further comprising a solid support.

Claim 19 (new): The isolated or recombinant antibody of claim 18, wherein the solid support comprises a bead or a column matrix.

Claim 20 (new): The isolated or recombinant antibody of claim 1 or claim 2, wherein the antibody is a polyclonal antibody.

Claim 21 (new): The isolated or recombinant antibody of claim 1 or claim 2, wherein the antibody is a monoclonal antibody.

Claim 22 (new): The isolated or recombinant antibody of claim 21, further comprising a hybridoma cell.

Claim 23 (new): The isolated or recombinant antibody of claim 1, further comprising a transgenic mouse.

Claim 24 (new): A method for detecting or isolating a polymerase comprising the following steps:

(a) providing an antibody as set forth in claim 1 or claim 2;

(b) providing a sample comprising a polymerase; and

(c) contacting the antibody of (a) with the sample of (b) and detecting the specific binding of the antibody to the polymerase in the sample, thereby detecting or isolating the polymerase.

Claim 25 (new): The method of claim 24, wherein the binding is detected by ELISA assay, sandwich assay, radioimmunoassay or Western blot.

Claim 26 (new): The method of claim 24, wherein the sample is a biological sample.

Claim 27 (new): The method of claim 24, wherein the antibody specifically binds a polypeptide comprising a sequence as set forth in SEQ ID NO:2.

Claim 28 (new): A method for making an antibody that specifically binds to a polymerase comprising the following steps:

(a) providing a polypeptide (i) encoded by a nucleic acid comprising a sequence having at least 70% sequence identity to SEQ ID NO:1 and encoding a polypeptide having polymerase activity, or (ii) having polymerase activity and at least 75% sequence identity to a sequence as set forth in SEQ ID NO:2; and

(b) administering the polypeptide to a non-human animal in an amount sufficient to generate an antibody that specifically binds to a polymerase.